

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>				
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence Wave/Twist in Tube				Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other <input type="checkbox"/>							

Work Order ID 89137

August-21-12 2:54:41 PM

89137

Page 2

Item ID: D3137-043

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Bracket Assembly

Stop

NS2

Start Date: 9/04/12 Start Qty: 6.00

6

Cust Item ID:

Required Date: 9/04/12 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

QC8- Inspect parts - second check

0.00

DAS
14
9-89

12/09/11

6 9

130

QC

Quality Control

140

Small Fab

0.00

6x

140

Small Fab

Memo

0.00

Small Fab

Assemble D3137-043 as per Dwg D3137

150

QC5- Inspect part completeness to step on W/O

0.00

DAS
15
9-89

13 Q2 - D

6

150

QC

Quality Control

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order ID 89137

89137

Page 3

August-21-12 2:54:41 PM

Item ID: D3137-043

Accept

N900040100

Setup

Start

NS1

Revision ID:

Stop

NS2

Item Name: Bracket Assembly

Start Date: 9/04/12 Start Qty: 6.00

6

Cust Item ID:

Required Date: 9/04/12 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

Identify as per dwg & Stock Location: ST235A

0.00

6

13-02-0189

160

Packaging

Packaging

Memo

0.00

170

QC21- Final Inspection - Work Order Release

0.00

170

QC

Quality Control

Memo

0.00

MB-024

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
				<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced			
				<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure			
				<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection:Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld			
				<input type="checkbox"/> Crushed/Crimped.	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled			
				<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved				
				<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong				
				<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Other			
				<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset					
				<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration					
				<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence					
				<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions					

Picklist Print

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Page 1

Work Order ID: 89137

Parent Item: D3137-043

Parent Item Name: Bracket Assembly

Start Date: 9/04/12

Required Date: 9/04/12

Comments: IPP Rev:A04.02.18New issueKJ/DS

IPP Rev B 08.07.03 ECN1207 EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3137-3 Guide		Manufactured	No			140	Each	24.0000	1	6		JB 13/02/01	
				<u>Location</u>			<u>Loc Qty</u>						
				ST235A			24						
				79735			4						
				85700			20						
→D3137-5 Washer		Manufactured	No			140	Each	23.0000	1	6		JB 13/02/01	
				<u>Location</u>			<u>Loc Qty</u>						
				ST235A			3						
				46740			3						
				ST235B			20						
				85688			20						
M174B0.500X02.000 17-4 SS Bar .500 x 2.00		Purchased	No			140	f	28.5571	0.4643	2.9324208			
				<u>Location</u>			<u>Loc Qty</u>						
				MAT050			28.5571						
				100843			1.037						
				103089			13						
				14932✓			13.1101						
				19572			1.41						
MS24694-S101 Screw		Purchased	No			100	Each	118.0000	1	6		JB 13/02/01	
				<u>Location</u>			<u>Loc Qty</u>						
				306			100						
				122441			100						
				ST290A			18						
				121443			8						
				121708			10						

NCR: Yes / No

DQA: _____ Date: 8

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>				
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence Wave/Twist in Tube				Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish Folio Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread Offset Out of Calibration Out of Sequence Outside Dimensions							
				Ovalized Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge							
				Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled							
				Other							

DART AEROSPACE LTD	Work Order:	89137
Description: Bracket	Part Number:	D3137-7
Inspection Dwg: D3137	Rev: F	Page 1 of 1

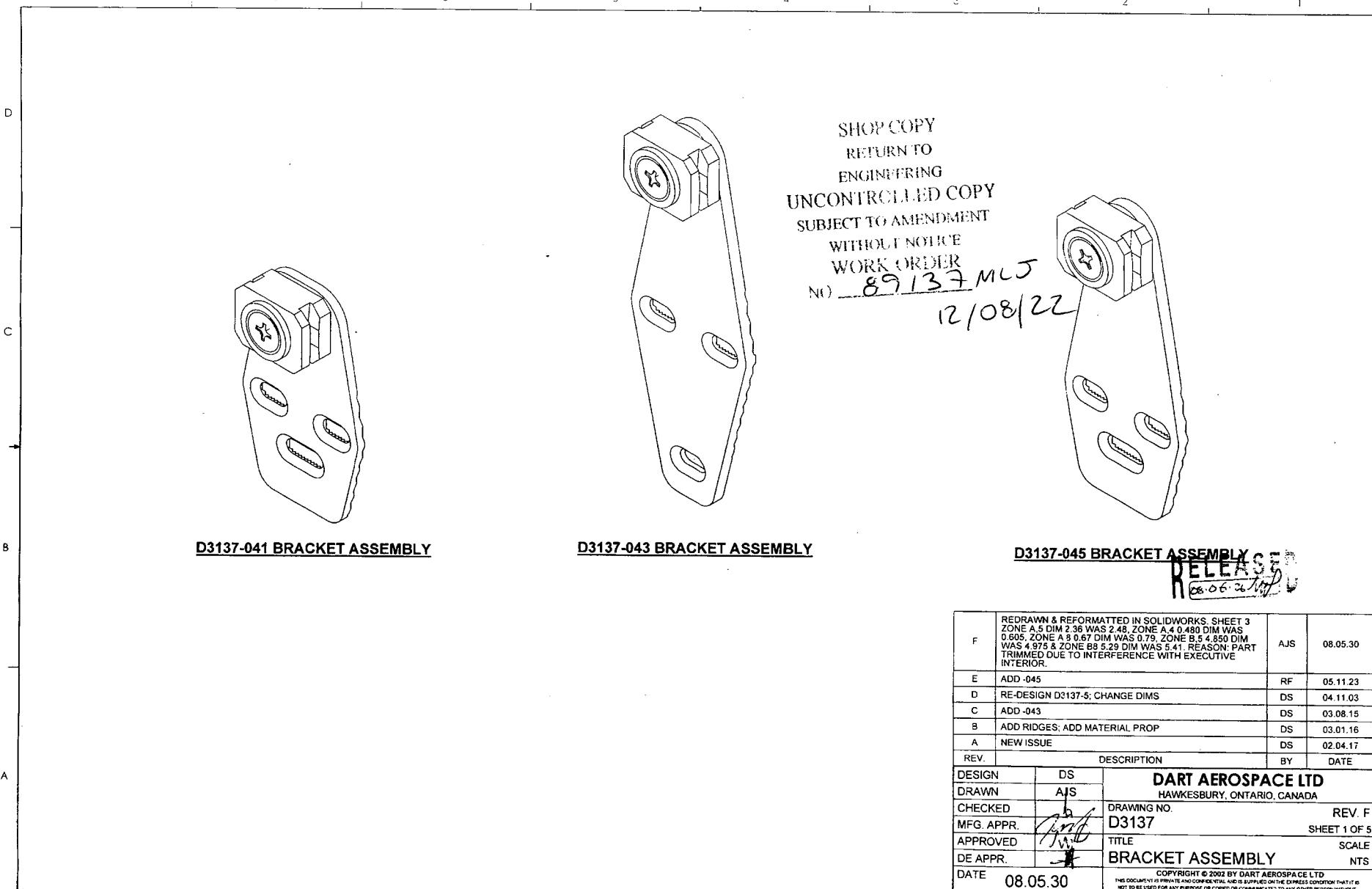
FIRST ARTICLE INSPECTION CHECKLIST

DAS

Measured by: <u>JL</u>	Audited by: <u>14</u> <small>9-09</small>	Preliminary Approval:	N/A
Date: <u>12-09-11</u>	Date: <u>12/09/11</u>		Date: N/A

Rev	Date	Change	Revised by	Approved
A	03.11.12	New Issue P/O D3137-043	KJ/RF	
B	04.06.15	Changed & added dimensions	KJ/JLM	
C	06.03.15	Dwg Rev updated	KJ/JLM	
D	08.12.02	Dwg Rev updated	KJ/DD	
E	10.08.03	Dimension 5.29 was 0.529	KJ	✓ ✓

8 7 6 5 4 3 2 1



D3137-041 BRACKET ASSEMBLY

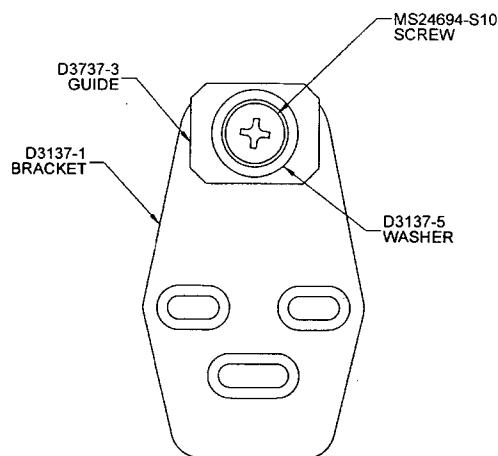
D3137-043 BRACKET ASSEMBLY

D3137-045 BRACKET ASSEMBLY

RELEASED
08.06.26 top

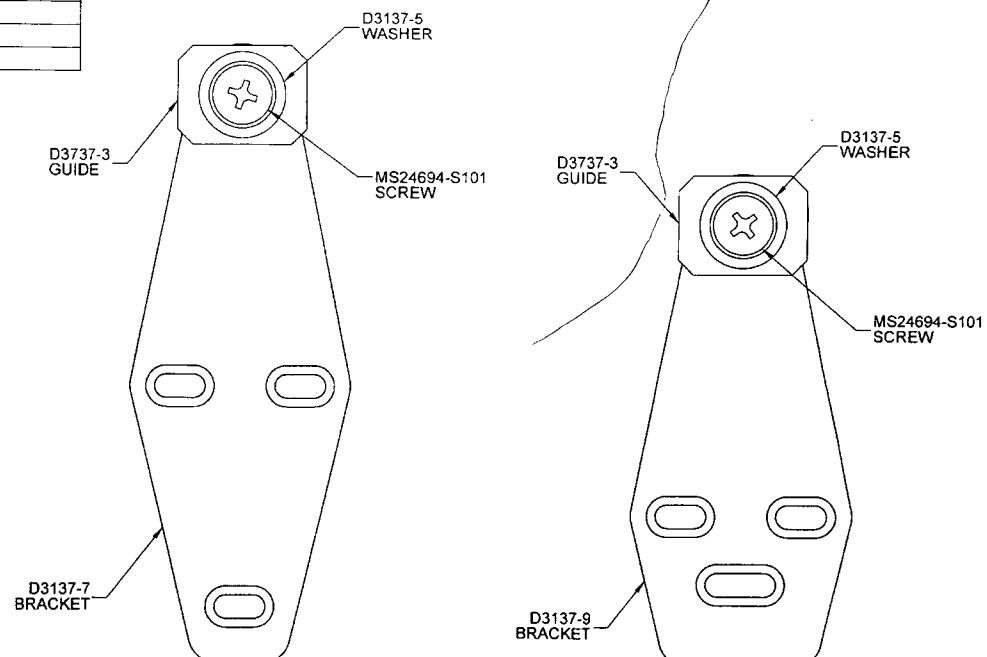
F	REDRAWN & REFORMATTED IN SOLIDWORKS. SHEET 3 ZONE A.5 DIM 2.36 WAS 2.48, ZONE A.4 0.480 DIM WAS 0.375, ZONE B.5 0.67 DIM WAS 0.79, ZONE B.5 4.850 DIM WAS 4.975 & ZONE B.6 2.29 DIM WAS 5.41. REASON: PART TRIMMED DUE TO INTERFERENCE WITH EXECUTIVE INTERIOR.	AJS	08.05.30
E	ADD -045	RF	05.11.03
D	RE-DESIGN D3137-5; CHANGE DIMS	DS	04.11.03
C	ADD -043	DS	03.08.15
B	ADD RIDGES; ADD MATERIAL PROP	DS	03.01.16
A	NEW ISSUE	DS	02.04.17
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>W</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>W</i>	D3137	SHEET 1 OF 5
APPROVED	<i>W</i>	TITLE	SCALE
DE APPR.	<i>W</i>	BRACKET ASSEMBLY	NTS
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QTY. -041	QTY. -043	QTY. -045	PART NUMBER	DESCRIPTION
X			D3137-041	BRACKET ASSEMBLY
	X		D3137-043	BRACKET ASSEMBLY
		X	D3137-045	BRACKET ASSEMBLY
1			D3137-1	BRACKET
1	1	1	D3137-3	GUIDE
1	1	1	D3137-5	WASHER
	1		D3137-7	BRACKET
		1	D3137-9	BRACKET
1	1	1	MS24694-S101	SCREW

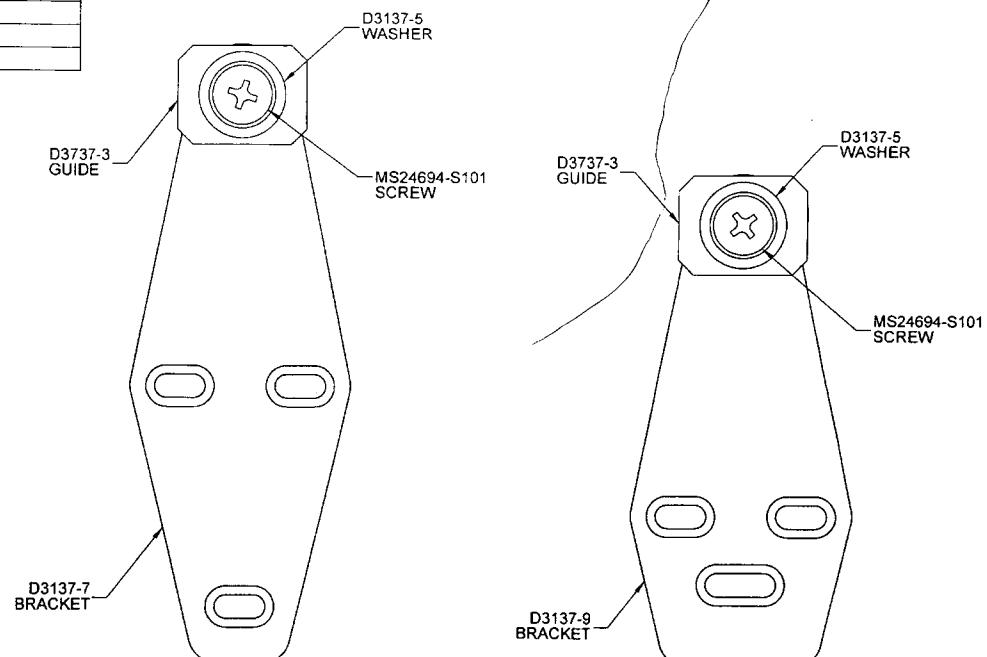


D3137-041 BRACKET ASSEMBLY

NOTES:
 1) MATERIAL: N/A
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: N/A
 6) IDENTIFICATION: N/A
 7) WEIGHT: 0.18 lbs -041
 : 0.32 lbs -043
 : 0.27 lbs -045



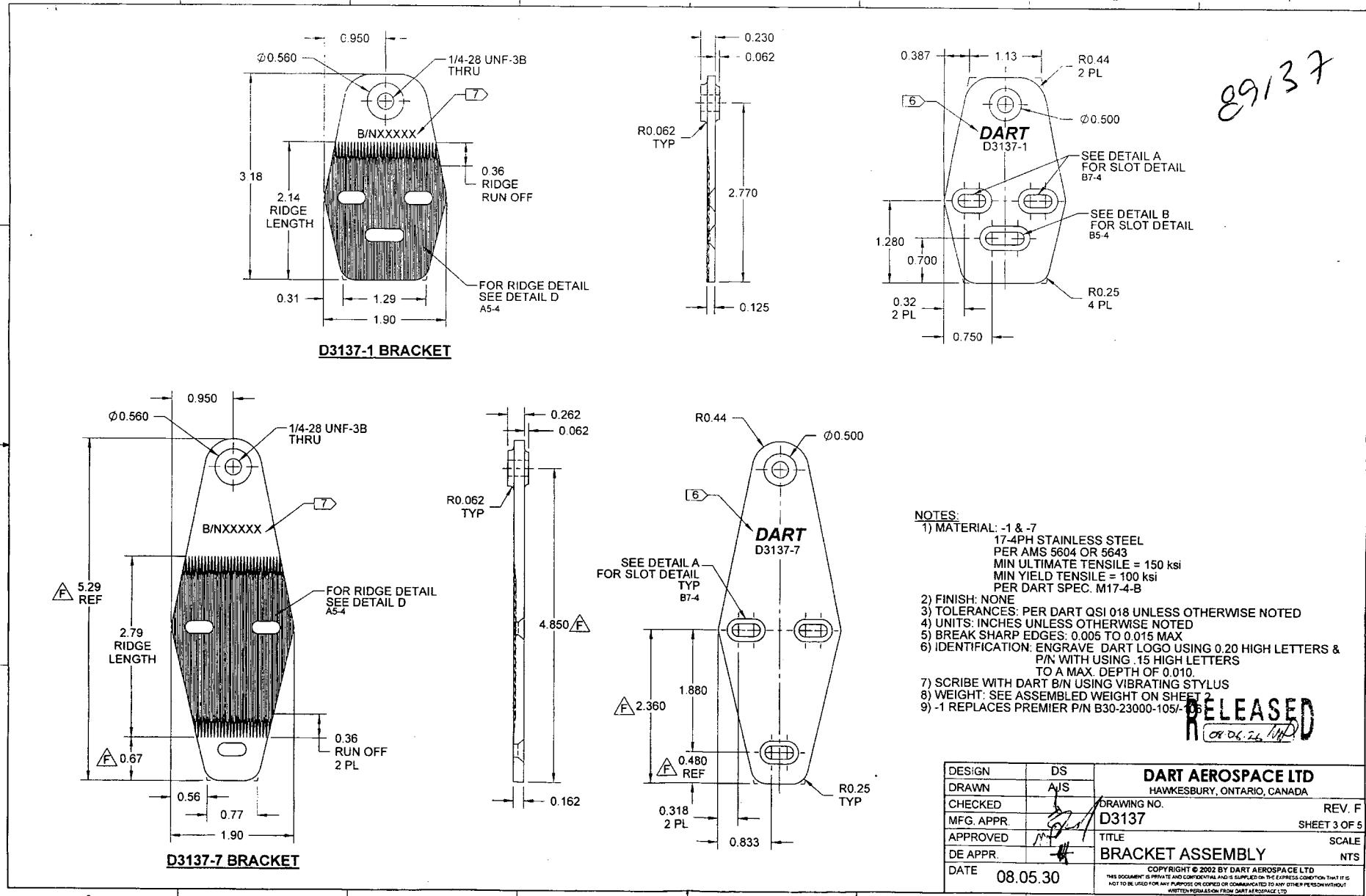
D3137-043 BRACKET ASSEMBLY



D3137-045 BRACKET ASSEMBLY

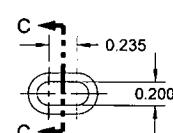
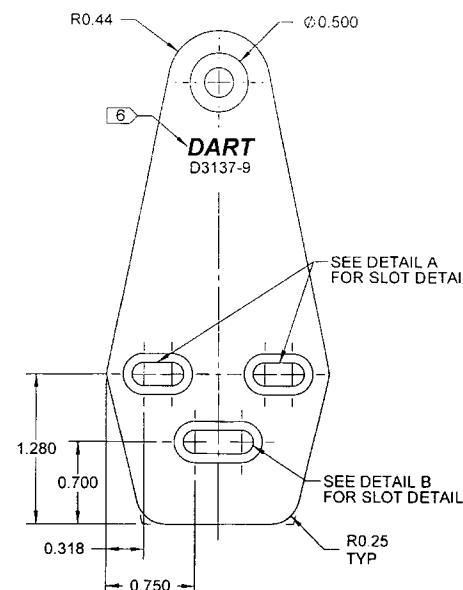
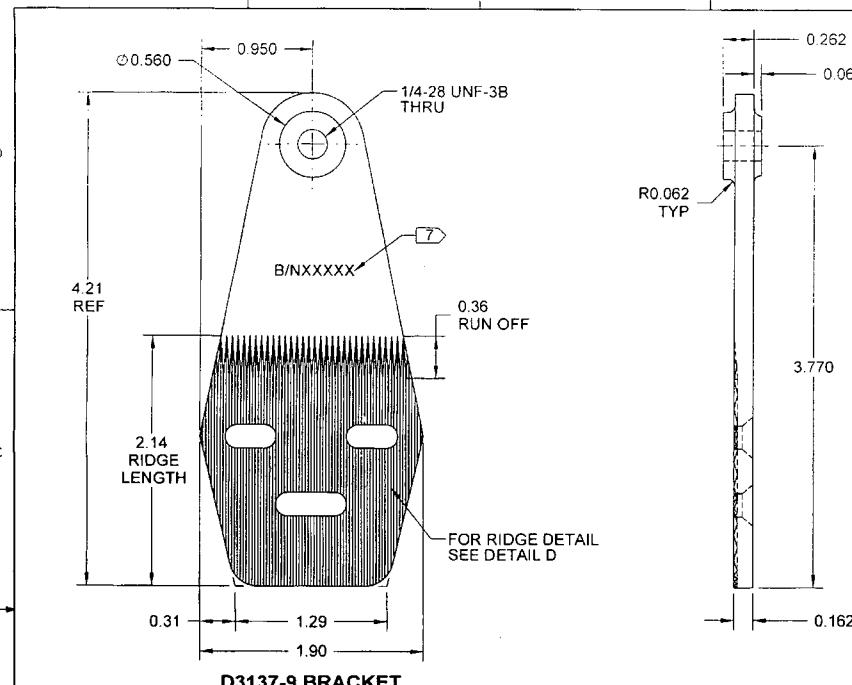
RELEASED
08.06.26/00

DESIGN	DS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3137	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BRACKET ASSEMBLY	NTS
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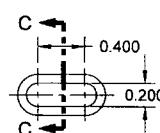


DESIGN	DS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	
MFG. APPR.		D3137	
APPROVED		REV. F	
DE APPR.		SHEET 3 OF 5	
DATE	08.05.30	TITLE	
		SCALE	
		NTS	

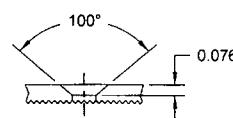
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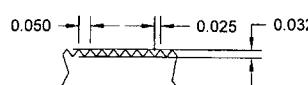
DETAIL A
(SLOT DETAIL)



DETAIL B
(SLOT DETAIL)



SECTION C-C
(SLOT DETAIL)



DETAIL D
SCALE 2X
(TYPICAL RIDGE DETAIL)

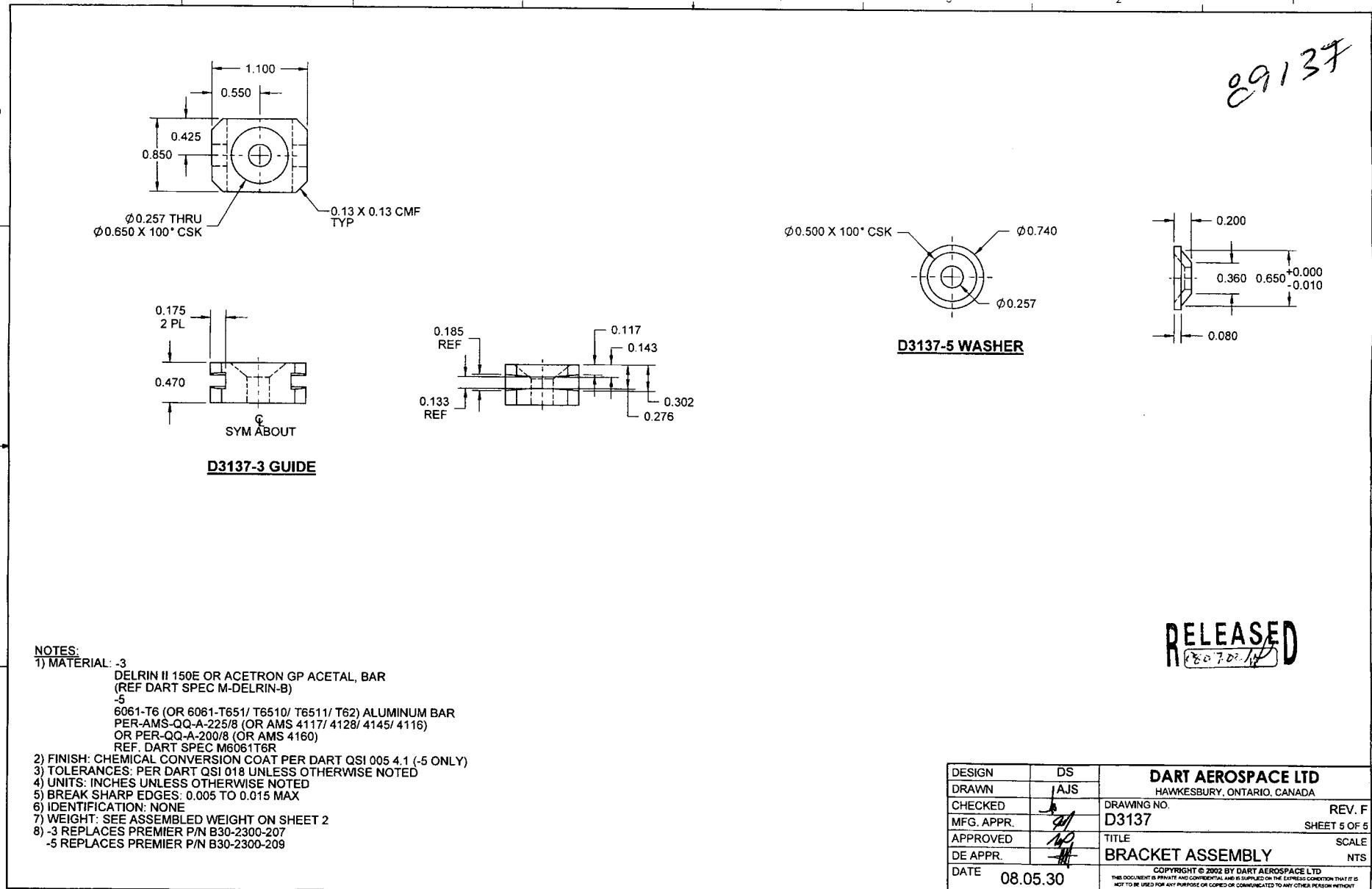
NOTES:

- 1) MATERIAL: 17-4PH STAINLESS STEEL
PER AMS 5604 OR 5643
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
PER DART SPEC. M17-4-B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: ENGRAVE DART LOGO USING 0.20 HIGH LETTERS & P/N WITH USING 15 HIGH LETTERS
TO A MAX. DEPTH OF 0.010
- 7) SCRIBE WITH DART B/N USING VIBRATING STYLUS
- 8) WEIGHT: SEE ASSEMBLED WEIGHT ON SHEET 2
- 9) REPLACES PREMIER P/N B30-23000-105/-106

RELEASED
08.05.30

DESIGN	DIS	DART AEROSPACE LTD	
DRAVN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. F
		D3137	SHEET 4 OF 5
MFG. APPR.		TITLE	SCALE
		BRACKET ASSEMBLY	NTS
APPROVED			
DE APPR.			
DATE	08.05.30		

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DESIGN	DS	DART AEROSPACE LTD	
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CHECKED		DRAWING NO.	REV. F
		D3137	SHEET 5 OF 5
MFG. APPR.		TITLE	SCALE
APPROVED		BRACKET ASSEMBLY	NTS
DE APPR.			
DATE	08.05.30		

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